

Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 6, with the following amended paragraph:

The present invention can be used in telecommunication systems such as Multiple Input Multiple Output or MIMO systems, where a transmitter comprises a first number of parallel transmitting branches arranged to simultaneously ~~and parallelly~~ transmit data in parallel, and where the receiver comprises a second number of parallel receiving branches arranged to simultaneously ~~and parallelly~~ receive data in parallel. The first number of transmitting branches can be equal to, or differ from, the second number of receiving branches. By using these parallel branches, enhancement of data rate and/or channel capacity can be achieved. MIMO systems are used in for example cellular radio systems such as GSM or UMTS, wireless radio systems such as DECT and in wireless networks such as LANs, WANs or PANs.